

TWO SIGNAL ONE POWER PLANE CIRCUIT BOARD

Abstract of the Disclosure

5 A method of forming a printed circuit board or circuit
card is provided with a metal layer which serves as a power
plane sandwiched between a pair of photoimageable dielectric
layers. Photoformed metal filled vias and photoformed plated
through holes are in the photopatternable material, and signal
circuitry is on the surfaces of each of the dielectric
materials and connected to the vias and plated through holes.
10 A border may be around the board or card including a metal
layer terminating in from the edge of one of the dielectric
layers. A copper foil is provided with clearance holes.
First and second layers of photoimageable curable dielectric
material is disposed on opposite sides of the copper which are
photoimageable material. The patterns are developed on the
first and second layers of the photoimageable material to
reveal the metal layer through vias. At the clearance holes
in the copper, through holes are developed where holes were
patterned in both dielectric layers. Thereafter, the surfaces
of the photoimageable material, vias and through holes are
metalized by copper plating. This is preferably done by
protecting the remainder of the circuitry with photoresist and
utilizing photolithographic techniques. The photoresist is
thereafter removed, leaving a circuit board or card having
20 metalization on both sides, vias extending from both sides to
the copper layer in the center, plated through holes
connecting the two outer circuitized copper layers.